

into eighteen segments, with a yellowish line down the centre of the whole and which was much darker towards the tail; on each segment were two dark spots; and long fine pointed hairs extended the whole length of the animal beyond the tail. The head had much the appearance of a cat, and my youngest boy, with child-like simplicity, called it "the little sea-cat," and would not let me rest until I had sketched it. The head was divided into three parts, the centre one being raised; on each side of this raised part were the crescent-shaped dark eyes, large in proportion to the animal; between the eyes three small dark spots; on each side of the snout were whisker-like appendages, spoon-shaped at the end; on each cheek a fan tipped with pointed hairs, which with the whiskers moved at times rapidly; at the hind part of the head two hoop-like ears—these also moved freely. It had, as well, short hairs on the tail, broadest at the outer end; these, as well as those on the head, were in rapid motion whenever the animal moved about, but quiet when it was at rest.

Figs. 7-9.—*Thaumantias lucifera*, which by some means had got into contact with a Sagitta. Whether it had employed the Sagitta to remove a bone which it had in its throat, after one of its delicate repasts, as the wolf did the crane, or not, I am unable to say: if so, he was not so honourable as the wolf; for despite of all the exertions of the Sagitta to free itself, and although the swallower's stomach was turned outwards in the struggle, he still refused to let him go; and the only difference that I could see was, the lips were pressed tighter round the head of his mouthful than before; for I frequently saw him, previously to the turn-out, smacking his lips, as if like the smoker of the present day he was enjoying his cigar: no doubt the dread of separation rendered this tight embrace necessary, having met with a very rough customer. This appears to me to be a proof positive that the Medusæ prey upon other animals, and hesitate not to attack those of large size, if they fall in their way; for I cannot believe this intrusion into the stomach of the Medusa arose from any Paul-Pry accident on the part of the Sagitta. It was a fearful struggle, maintained with great obstinacy on both sides, and which I watched for a quarter of an hour. I left them still locked, at 2 A.M., hoping at daylight to see the result of the affair, but found the vanquisher and the vanquished had vanished, and left only a very minute granular wreck behind. This rapid destruction is not uncommon among the minute objects which swarm in the sea; for as soon as the least weakness or sign of decay takes place, the still smaller scavengers fall upon them, and in a very short time all trace of them is lost—so abundant and so voracious are these sweepers.

TIME OF SPAWNING OF BRITISH CRUSTACEA.

To the Editors of the Annals of Natural History.

GENTLEMEN,

Weymouth, Nov. 3, 1851.

I INCLOSE you a table of data which may probably assist in determining the times of spawning of twenty-four species of Crustacea taken at Weymouth. I have taken many other species, and many other specimens of the species of which I now inclose the list, but not one

carried ova. I think it would be as well to make a list with all the data, and by this means we might, were the observations carried out at different parts of the coast, fill up a hiatus in the œconomy of the Crustacea, and that not the least interesting: the depth of water should also be recorded. The list I propose is of such as are taken not carrying ova, and this, with the table now sent you, will form a basis for further calculations.

Since my notice of *Achæus Cranchii*, in the July number of the 'Annals,' I have been fortunate enough to procure two more specimens; still they must not be considered as otherwise than rare on this coast.

I am, Gentlemen, yours very obediently,
WILLIAM THOMPSON.

Species.	Date when found carrying ova.	General Remarks.
<i>Cancer Pagurus</i>	March 8, 1850.	Caught in a crab-pot: ova orange colour: the carapace was 3 inches wide.
<i>Carcinus Mænas</i>	March 11, 1850. May 28, 1851.	Ova of an orange-brown.
<i>Corystes Cassivelaunus</i> .	March 16, 1850. April 27, 1850.	I found seven females thrown up March 16, 1850; of these only four carried spawn.
<i>Crangon bispinosus</i> ...	Feb. 11, 1851.	The ova is of a bright sea-green. Specimens taken Feb. 23 and May 24 had no spawn.
<i>C. vulgaris</i>	Jan. 29, Feb. 13, April 13, 1851.	
<i>Galathea squamifera</i> ...	March 29, 1850.	
<i>G. strigosa</i>	Nov. 7, 1851.	Caught in a lobster-pot: the ova are very small, and of a beautiful garnet colour.
<i>Hippolyte Cranchii</i> ...	May 24, July 13, Aug. 2, 1851.	Ova of a reddish colour.
<i>H. varians</i>	May 24, 1851.	Ova of a reddish colour.
<i>Homarus vulgaris</i>	Feb. 20, 1851.	
<i>Hyas araneus</i>	Jan. 18, 1851.	Ova of a dark brown.
<i>H. coarctatus</i>	Feb. 15, 20 & 27, 1851.	Ova of a rich orange colour and much developed.
<i>Pagurus Bernhardus</i> ...	Jan. 7, 1850.	Out of eighteen specimens eleven carried ova, which are of a dark purple nearly approaching to black.
<i>P. cuanensis</i>	May 24, 1851.	Three out of ten carried spawn of a rich orange-brown colour.
<i>P. Hyndmanni</i>	July 13, 1851.	Ova black.
<i>P. Prideauxii</i>	Jan. 11, Feb. 21, 1851.	Ova orange.
<i>Pilumnus hirtellus</i>	May 30, 1851.	Ova very small and of a bright orange colour.
<i>Pinnotheres pisum</i>	April 27, July 23, 1850.	Ova of an orange colour.
<i>Pisa tetraodon</i>	May 27, 1851.	Ova small and of a bright red. Not sufficient in quantity to force back the abdomen.

Species.	Date when found carrying ova.	General Remarks.
<i>Porcellana longicornis</i> .	May 27, 1851.	Ova small and of a bright orange-brown; much more developed in some specimens than in others.
<i>P. platycheles</i>	May 30, 1850. May 30, 1851.	The ova are larger than in <i>Pilumnus hirtellus</i> , but of the same bright orange colour.
<i>Portunus variegatus</i> ...	July 23, 1850.	
<i>P. arcuatus</i>	I believe in January 1850.	Ova red. I have a specimen in spawn I obtained from the oyster-dredgers, who do not dredge beyond February, but unfortunately I omitted to make a note.
<i>P. puber</i>	Feb. 27, 1851.	The ova are of an orange colour: caught in a lobster-pot.
<i>Stenorhynchus phalangium</i> .	Feb. 27, May 24, 1851.	Ova of a dark orange colour. In the specimen of Feb. 27, and one of May 24, the ova were very much developed, but in a second of the latter date very little developed.

Geographical Distribution of Hymenoptera in Arctic North America.

By ADAM WHITE, F.L.S.

“Otho Fabricius first, perhaps, recorded the names of any of the Hymenoptera of Arctic North America. Doubtless Baffin, Frobisher, and other manly navigators recognised humble bees and other bees during their summer voyages, and *may* have, in print or in manuscript, with sailor-like earnestness, made mention of every such occurrence in their journals. It is delightful to read the notices of flowers and verdure, in their accounts of the hurried spring, summer, and autumn of a Greenland year, of five-sixths winter. *Where* flowers and verdure abound, even for six weeks or a shorter time, *there* insects must be found;—*there* insects of the order Hymenoptera, the order to which this notice is limited, *must* occur. Flowers and Hymenoptera must be together.

“Otho Fabricius records two species of Hymenoptera as being brought by him from Greenland. His book, so admirable a model of a local fauna as to be even now one of the standards of excellence, was published in 1780. The next considerable accession to our acquaintance with the Hymenoptera of British America was made by Redman, who collected in Nova Scotia many fine species now in the British Museum. Some of these, such as *Pelecinus*, *Sirices*, *Ichneumonidae*, &c., were very prominent species, and are now being worked out in the vast collections of the National Museum.

“Sir John Richardson and his brave comrades collected many species, which were lost during their disastrous journey. They still, however, brought many insects to England, and in the ‘Fauna Boreali-Americana’ these insects are described by the venerable Kirby. The species of Hymenoptera are very few; there are only *thirty-two altogether*, including those of Canada and Nova Scotia;